

First Inventor: Christopher Calhoun
Application No. 10/632,014
Page 2

MA9606P

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method for attenuating adhesions between a human implant and surrounding tissue following a surgical procedure in a human patient, the method comprising:
 providing a non-porous, resorbable polymer base material; and
 applying the resorbable polymer base material in a form of a resorbable thin membrane around the human implant to thereby cover substantially all exposed surfaces of the implant, wherein the resorbable thin membrane is substantially non-porous and comprises a layer of polymer base material selected from the group consisting essentially of:
 a lactide polymer; and
 a copolymer of two or more cyclic esters.

2. (Original) The method according to claim 1, wherein:
 the resorbable thin membrane comprises a substantially planar membrane of resorbable polymer base material having a first substantially smooth side and a second substantially smooth side, the substantially planar membrane of resorbable polymer base material having a substantially uniform composition;
 the membrane of polymer base material comprises a single layer of resorbable polymer base material having a thickness, measured between the first substantially smooth side and the second substantially smooth side, that is between about 10 microns and about 100 microns; and
 the single layer of resorbable polymer base material is adapted to maintain a smooth-surfaced barrier between the implant and surrounding tissue, and is adapted to be resorbed into a mammalian body within a period of less than approximately 24 months from an initial implantation of the implant into the patient.

First Inventor: Christopher Calhoun
Application No. 10/632,014
Page 3

MA9606P

3. (Original) The method according to claim 1, wherein the polymer base material comprises about 60-80% of L-lactide and about 20-40% of D,L-lactide.

4. (Original) The method according to claim 1, wherein the resorbable thin membrane is in contact with the surfaces of the implant when it is applied to the implant.

5. (Original) The method according to claim 1, wherein the step of applying the thin membrane onto the implant comprises a technique selected from the group consisting of wrapping, interweaving, blanketing, draping, taping, adjacent placement, juxtaposed positioning and sandwiching of the membrane onto the implant.

6. (Original) The method according to claim 1, wherein the step of applying the thin membrane onto the implant comprises heat-shrinking the thin membrane around the implant.

7. (Original) The method according to claim 1, wherein the step of applying the thin membrane onto the implant comprises:

dissolving a polymer material in a solvent to form a solution; and
coating the implant with the solution.

8. (Currently Amended) The method according to claim 7, wherein:
the polymer material is selected from the group consisting essentially of a lactide polymer and a copolymer of two or more lactides; and
the solvent is selected from the group comprising ethyl acetate, acetonitrile, acetone, methyl ethyl ketone, tetrahydrofuran, methyl pyrole, and any combination thereof.

9. (Original) The method according to claim 8, wherein the solution comprises a concentration in the range of about 0.1 to about 5.0% of the polymer.

First Inventor: Christopher Calhoun
Application No. 10/632,014
Page 4

MA9606P

10. (Original) The method according to claim 7, further comprising a step of drying the coated implant before placement into a surgical site.

11. (Original) The method according to claim 10, wherein the step of drying comprises drying the coated implant in a vacuum oven.

12. (Original) The method according to claim 11, further comprising the step of air drying the coated implant before placement in the vacuum oven.

13. (Original) The method according to claim 7, wherein the step of coating the implant comprises spraying the implant with the solution.

14. (Original) The method according to claim 1, wherein the implant comprises biological material.

15. (Original) The method according to claim 14, wherein the biological material comprises grafting material.

16. (Original) The method according to claim 15, wherein the grafting material is selected from the group consisting of autograft material, xenograft material, allograft material, and combinations thereof.

17. (Original) The method according to claim 15, wherein the grafting material is selected from the group consisting of veins, arteries, heart valves, skin, dermis, epidermis, nerves, tendons, ligaments, bone, bone marrow, blood, white blood cells, red blood cells, gonadocytes, embryos, cells, adipose, fat, muscle, cartilage, fascia, membranes, pericardium, plura, periostium, peritoneum and dura.

First Inventor: Christopher Calhoun
Application No. 10/632,014
Page 5

MA9606P

18. (Original) The method according to claim 15, wherein the surrounding tissue is selected from the group comprising fascia, soft tissues, muscle, organs, fat, adipose, membranes, pericardium, plura, periostium, peritoneum, dura, bowels, intestines, ovaries, veins, arteries, epidermis, tendons, ligaments, nerves, bone and cartilage.

19. (Original) The method according to claim 1, wherein the implant comprises a transplanted organ.

20. (Original) The method according to claim 19, wherein the surrounding tissue is selected from the group comprising fascia, soft tissues, muscle, organs, fat, adipose, membranes, pericardium, plura, periostium, peritoneum, dura, bowels, intestines, ovaries, veins, arteries, epidermis, tendons, ligaments, nerves, bone and cartilage.

21. (Original) The method according to claim 1, wherein the implant comprises non-biological material.

22. (Original) The method according to claim 21, wherein the implant comprises a medical device.

23. (Original) The method according to claim 22, wherein the medical device is selected from the group consisting of bone graft substitutes, bone cement, tissue glues and adhesives, bone fixation members, defibrillators, eye spheres, sutures, staples, cochlear implants, pumps, artificial organs, non-resorbable membranes, bone growth stimulators, neurological stimulators, dental implants, guided tissue and guided bone regeneration membranes, eye lid weights and tympanostomy tubes.

24. (Original) The method according to claim 22, wherein the medical device comprises a fluid-filled prosthesis.

First Inventor: Christopher Calhoun
Application No. 10/632,014
Page 6

MA9606P

25. (Original) The method according to claim 23, wherein the surrounding tissue is selected from the group comprising fascia, soft tissues, muscle, organs, fat, adipose, membranes, pericardium, plura, periostium, peritoneum, dura, bowels, intestines, ovaries, veins, arteries, epidermis, tendons, ligaments, nerves, bone and cartilage.

26. (Original) The method according to claim 24, wherein the surrounding tissue is selected from the group comprising fascia, soft tissues, muscle, organs, fat, adipose, membranes, pericardium, plura, periostium, peritoneum, dura, bowels, intestines, ovaries, veins, arteries, epidermis, tendons, ligaments, nerves, bone and cartilage.

27. (Original) The method according to claim 24, wherein the fluid-filled prosthesis comprises a breast implant.

28. (Original) The method according to claim 27, wherein the breast implant comprises a saline implant contained within a silicone casing.

29. (Original) The method according to claim 22, wherein the implant comprises a pacemaker.

30-33. Cancelled.

34. (Currently Amended) The method according to claim 33 1, wherein the implant comprises grafting material is selected from the group consisting of autograft material, xenograft material, allograft material, and combinations thereof.

35. (Original) The method according to claim 34, wherein the grafting material is selected from the group consisting of veins, arteries, heart valves, skin, dermis, epidermis, nerves, tendons, ligaments, bone, bone marrow, blood, white blood cells, red blood cells, gonadocytes,

First Inventor: Christopher Calhoun
Application No. 10/632,014
Page 7

MA9606P

embryos, cells, adipose, fat, muscle, cartilage, fascia, membranes, pericardium, plura, periostium, peritoneum and dura.

36. (Currently Amended) The method according to claim 34 1, wherein the surrounding tissue is selected from the group comprising fascia, soft tissues, muscle, organs, fat, adipose, membranes, pericardium, plura, periostium, peritoneum, dura, bowels, intestines, ovaries, veins, arteries, epidermis, tendons, ligaments, nerves, bone and cartilage.

37-50. Cancelled.

51. (New) A method of using a resorbable polymer base material in combination with an implant for the purpose of attenuating adhesions between the implant and surrounding tissue following a surgical procedure in a human patient, the method comprising:

providing a non-porous, resorbable polymer base material;

applying the resorbable polymer base material in a form of a resorbable thin membrane around the implant to thereby cover substantially all exposed surfaces of the implant, wherein the resorbable thin membrane is substantially non-porous and comprises a layer of polymer base material selected from the group consisting of:

a lactide polymer; and

a copolymer of two or more cyclic esters; and

applying the implant and the resorbable thin membrane to the human patient.